

Interim Seismic Retrofit-East Bay Yerba Buena Island Viaduct (Contract No. 04-043004)

The as-built drawings, which are contained in these CDs, are scanned from drawings of the existing structure for the convenience of the contractor and as a means to convey to the contractor the available information regarding the existing structure. It is to be understood that no claim is being made as to the accuracy or completeness of the said information and that the State of California or its officers or agents shall not be responsible for the manner in which the contractor interprets and uses this information or for the accuracy, currency or completeness of these scanned as-built drawings. The contractor shall be responsible to obtain, at the contractor's expense, any additional information that the contractor deems necessary for completely and accurately assessing the existing conditions of the structure. The contractor shall not be entitled to any compensation for any claim arising from inaccuracy or insufficiency of these as-built drawings or in anyway related to these drawings.

[58. General Plan No. 1](#)

[59. General Plan No. 2](#)

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[64. Bents 46, 47, 48 & 50](#)

[65. Bent 49](#)

[66. Bent 51](#)

[67. Bent 52](#)

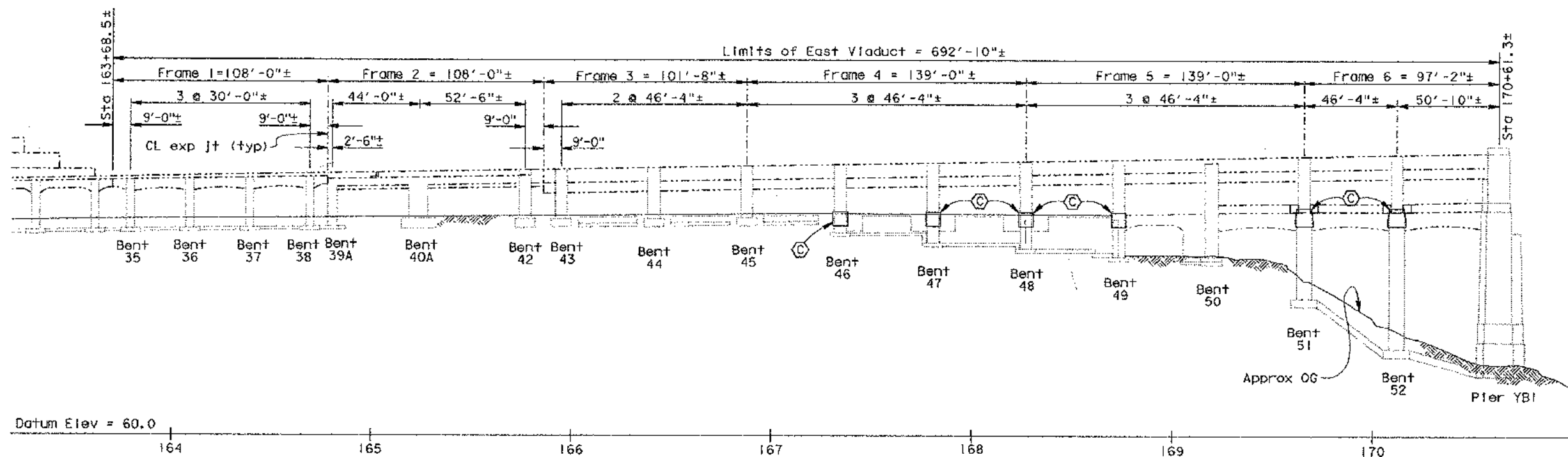
[68. Bent 51-52 Details](#)

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Alameda	80	7.8/8.9, 0.0/1.1	58	205

Tariq Masroor
REGISTERED ENGINEER - CIVIL
10-30-97
12-8-97
PLANS APPROVAL DATE

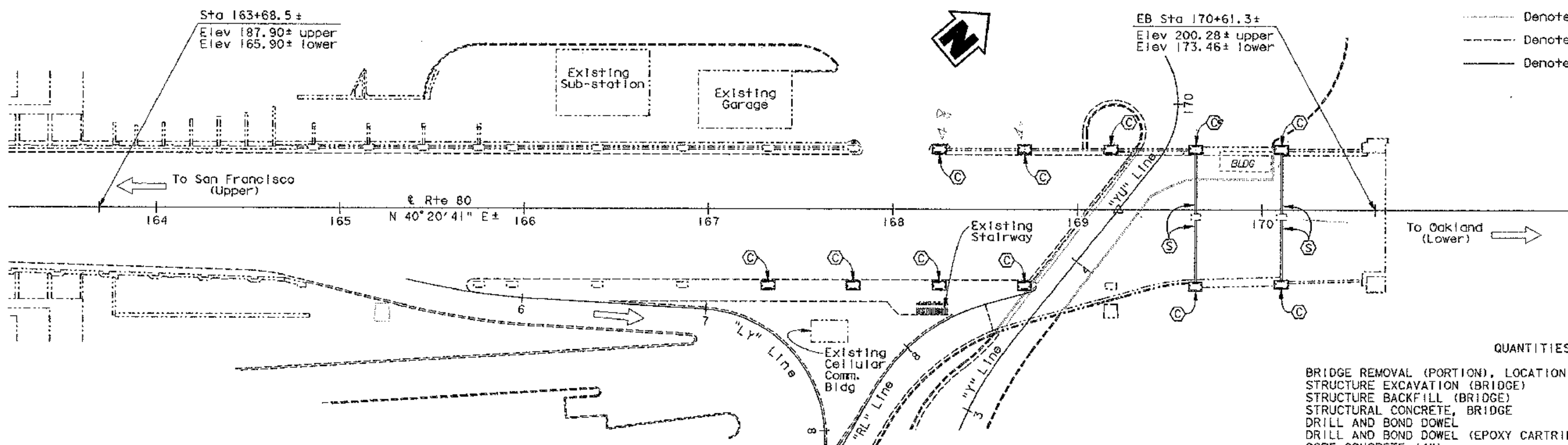
Tariq Masroor
No. 51586
Exp. 6-30-98
CIVIL
STATE OF CALIFORNIA

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SOUTH ELEVATION

1" = 30'



LOWER DECK PLAN

1" = 30'

NOTES (New Construction)

- ⊙ Partial height concrete column collar
- ⊙ Shear Wall In-Fill

LEGEND

- Denotes existing structure
- Denotes existing sub-structure
- Denotes existing roadway
- Denotes new construction

QUANTITIES

BRIDGE REMOVAL (PORTION), LOCATION A	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	198	CY
STRUCTURE BACKFILL (BRIDGE)	166	CY
STRUCTURAL CONCRETE, BRIDGE	147	CY
DRILL AND BOND DOWEL	1,324	LF
DRILL AND BOND DOWEL (EPOXY CARTRIDGE)	155	EA
CORE CONCRETE (4")	3	LF
BAR REINFORCING STEEL (BRIDGE)	28,310	LB

NOTES:


- For General Notes see "Index To Plans" sheet.
- The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

INTERIM SEISMIC RETROFIT PROJECT

EAST BAY YERBA BUENA ISLAND VIADUCT

SAN FRANCISCO - OAKLAND BAY BRIDGE

GENERAL PLAN NO. 1

 DESIGN ENGINEER	DESIGN	BY Tariq Masroor	CHECKED Richard Porter			STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES STRUCTURE DESIGN 13	BRIDGE NO.	34-0004	SAN FRANCISCO - OAKLAND BAY BRIDGE GENERAL PLAN NO. 1	
	DETAILS	BY Xifeng Wu	CHECKED G. Joe	LAYOUT	BY Tariq Masroor			CHECKED Richard Porter	POST MILE		7.85
	QUANTITIES	BY Richard Porter	CHECKED Tariq Masroor	SPECIFICATIONS	BY Steve Margolis			CHECKED Steve Margolis	PLANS AND SPECS COMPALED		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						CU 04 EA 043001	DISREGARD PRINTS BEARING EARLIER REVISION DATES				
							REVISION DATES (PRELIMINARY STAGE ONLY)				
							3/1/71 3/2/71 4				

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
3/1/97 3/2/97 3/3/97 3/4/97 3/5/97 3/6/97 3/7/97 3/8/97 3/9/97 3/10/97 3/11/97 3/12/97 3/13/97 3/14/97 3/15/97 3/16/97 3/17/97 3/18/97 3/19/97 3/20/97 3/21/97 3/22/97 3/23/97 3/24/97 3/25/97 3/26/97 3/27/97 3/28/97 3/29/97 3/30/97 3/31/97 4/1/97 4/2/97 4/3/97 4/4/97 4/5/97 4/6/97 4/7/97 4/8/97 4/9/97 4/10/97 4/11/97 4/12/97 4/13/97 4/14/97 4/15/97 4/16/97 4/17/97 4/18/97 4/19/97 4/20/97 4/21/97 4/22/97 4/23/97 4/24/97 4/25/97 4/26/97 4/27/97 4/28/97 4/29/97 4/30/97 5/1/97 5/2/97 5/3/97 5/4/97 5/5/97 5/6/97 5/7/97 5/8/97 5/9/97 5/10/97 5/11/97 5/12/97 5/13/97 5/14/97 5/15/97 5/16/97 5/17/97 5/18/97 5/19/97 5/20/97 5/21/97 5/22/97 5/23/97 5/24/97 5/25/97 5/26/97 5/27/97 5/28/97 5/29/97 5/30/97 5/31/97 6/1/97 6/2/97 6/3/97 6/4/97 6/5/97 6/6/97 6/7/97 6/8/97 6/9/97 6/10/97 6/11/97 6/12/97 6/13/97 6/14/97 6/15/97 6/16/97 6/17/97 6/18/97 6/19/97 6/20/97 6/21/97 6/22/97 6/23/97 6/24/97 6/25/97 6/26/97 6/27/97 6/28/97 6/29/97 6/30/97 7/1/97 7/2/97 7/3/97 7/4/97 7/5/97 7/6/97 7/7/97 7/8/97 7/9/97 7/10/97 7/11/97 7/12/97 7/13/97 7/14/97 7/15/97 7/16/97 7/17/97 7/18/97 7/19/97 7/20/97 7/21/97 7/22/97 7/23/97 7/24/97 7/25/97 7/26/97 7/27/97 7/28/97 7/29/97 7/30/97 7/31/97 8/1/97 8/2/97 8/3/97 8/4/97 8/5/97 8/6/97 8/7/97 8/8/97 8/9/97 8/10/97 8/11/97 8/12/97 8/13/97 8/14/97 8/15/97 8/16/97 8/17/97 8/18/97 8/19/97 8/20/97 8/21/97 8/22/97 8/23/97 8/24/97 8/25/97 8/26/97 8/27/97 8/28/97 8/29/97 8/30/97 8/31/97 9/1/97 9/2/97 9/3/97 9/4/97 9/5/97 9/6/97 9/7/97 9/8/97 9/9/97 9/10/97 9/11/97 9/12/97 9/13/97 9/14/97 9/15/97 9/16/97 9/17/97 9/18/97 9/19/97 9/20/97 9/21/97 9/22/97 9/23/97 9/24/97 9/25/97 9/26/97 9/27/97 9/28/97 9/29/97 9/30/97 10/1/97 10/2/97 10/3/97 10/4/97 10/5/97 10/6/97 10/7/97 10/8/97 10/9/97 10/10/97 10/11/97 10/12/97 10/13/97 10/14/97 10/15/97 10/16/97 10/17/97 10/18/97 10/19/97 10/20/97 10/21/97 10/22/97 10/23/97 10/24/97 10/25/97 10/26/97 10/27/97 10/28/97 10/29/97 10/30/97 10/31/97 11/1/97 11/2/97 11/3/97 11/4/97 11/5/97 11/6/97 11/7/97 11/8/97 11/9/97 11/10/97 11/11/97 11/12/97 11/13/97 11/14/97 11/15/97 11/16/97 11/17/97 11/18/97 11/19/97 11/20/97 11/21/97 11/22/97 11/23/97 11/24/97 11/25/97 11/26/97 11/27/97 11/28/97 11/29/97 11/30/97 12/1/97 12/2/97 12/3/97 12/4/97 12/5/97 12/6/97 12/7/97 12/8/97 12/9/97 12/10/97 12/11/97 12/12/97 12/13/97 12/14/97 12/15/97 12/16/97 12/17/97 12/18/97 12/19/97 12/20/97 12/21/97 12/22/97 12/23/97 12/24/97 12/25/97 12/26/97 12/27/97 12/28/97 12/29/97 12/30/97 12/31/97	1	11

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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Alameda	80	7.8/8.9, 0.0/1.1	59	205

Tariq Masroor
REGISTERED ENGINEER - CIVIL
10-30-97

12-8-97
PLANS APPROVAL DATE

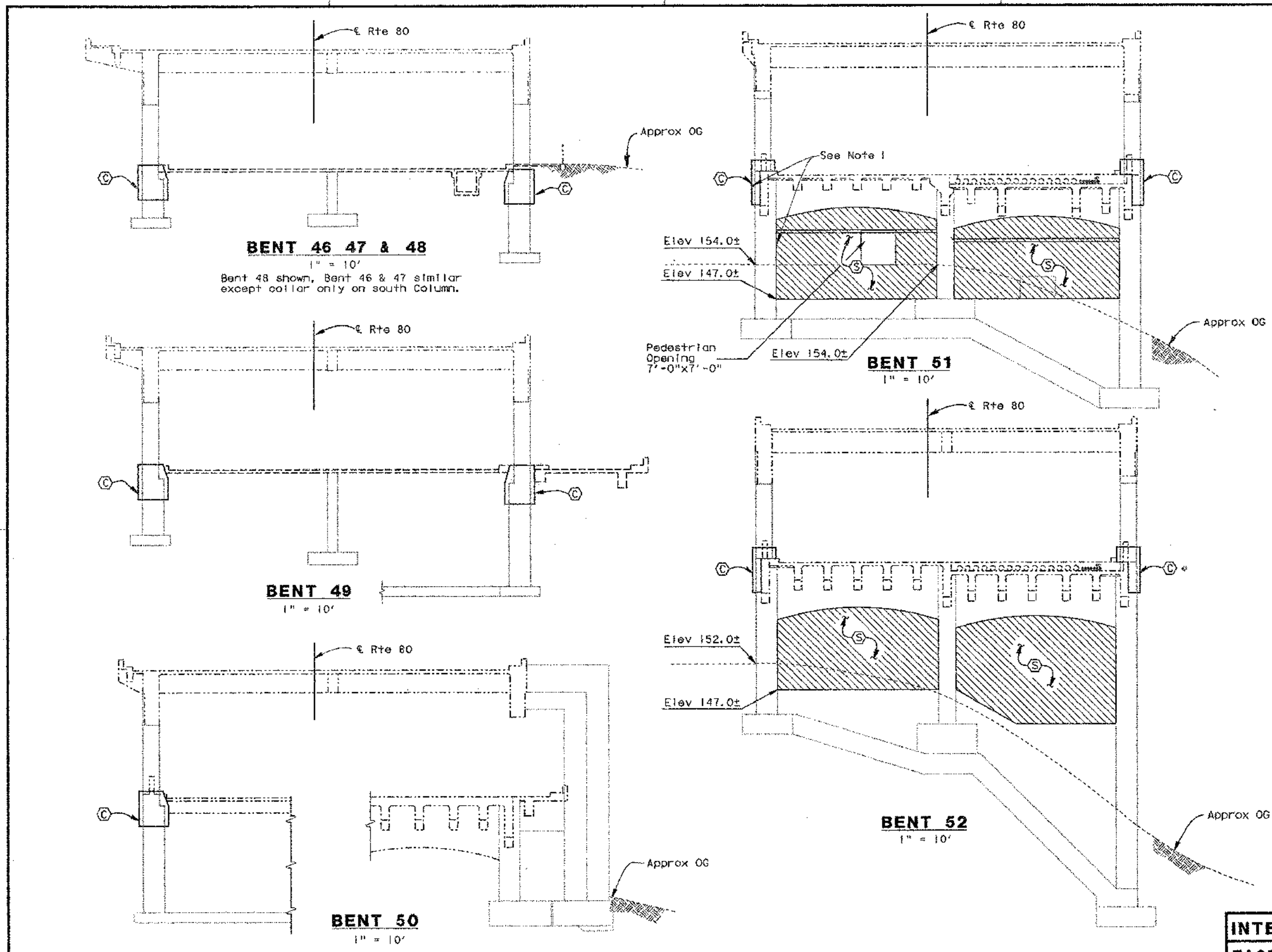
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- NOTES**
- Ⓒ Partial height concrete column collar
 - Ⓔ Shear Wall in-fill
 - 1. Existing lighting conduit (1" to 1 1/4") to remain operational during construction. See applicable sheet for electrical work.

- LEGEND**
- Denotes existing structure
 - Denotes existing sub-structure
 - Denotes existing roadway
 - Denotes new construction
 - ▨ Denotes limits of shear wall in-fill

NOTE:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

INTERIM SEISMIC RETROFIT PROJECT
EAST BAY YERBA BUENA ISLAND VIADUCT
SAN FRANCISCO - OAKLAND BAY BRIDGE
GENERAL PLAN NO. 2



DESIGN	BY Tariq Masroor	CHECKED Richard Porter
DETAILS	BY Xing RU	CHECKED Richard Porter
QUANTITIES	BY Richard Porter	CHECKED Tariq Masroor

STATE OF CALIFORNIA	DIVISION OF STRUCTURES	BRIDGE NO. 34-0004
DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN 13	POST MILE 7.85

CU 04	EA 043001
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DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET 2 OF 11
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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF. Alameda	80	7.8/8.9, 0.0/1.1	60	205

Tariq Masroor

REGISTERED ENGINEER - CIVIL

10-30-97

12-8-97

PLANS APPROVAL DATE

PROFESSIONAL ENGINEER

Tariq Masroor

No. 51686

Exp. 8-30-98

CIVIL

STATE OF CALIFORNIA

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INDEX TO PLANS

SHEET NO.	TITLE
1.	GENERAL PLAN NO. 1
2.	GENERAL PLAN NO. 2
3.	INDEX TO PLANS
4.	REMOVAL AND REPLACEMENT BENTS 46RT-49RT
5.	REMOVAL AND REPLACEMENT BENT 48LT-50LT
6.	REMOVAL AND REPLACEMENT BENT 51 & 52
7.	BENTS 46, 47, 48 & 50
8.	BENT 49
9.	BENT 51
10.	BENT 52
11.	BENT 51 - 52 DETAILS

GENERAL NOTES

DESIGN: BRIDGE DESIGN SPECIFICATIONS
- 1983 AASHTO with Interims and Revisions by CALTRANS.

REINFORCED
CONCRETE:

EXISTING (ASSUMED FOR
RETROFIT EVALUATION)

$f_y = 33,000 \text{ psi}$ (GRADE 33)
 $f_y = 44,000 \text{ psi}$ (GRADE 40)
 $f'_c = 5,000 \text{ psi}$

NEW CONSTRUCTION

$f_y = 60,000 \text{ psi}$
 $f'_c = 4,000 \text{ psi}$

STRUCTURAL
STEEL:

$f_y = 36,000 \text{ psi}$ (ASTM A36)
Unless otherwise noted.

STANDARD PLAN DATED: JULY 1992

A10A ABBREVIATIONS
A10B SYMBOLS
B01 BRIDGE DETAILS

INTERIM SEISMIC RETROFIT PROJECT
EAST BAY YERBA BUENA ISLAND VIADUCT
SAN FRANCISCO - OAKLAND BAY BRIDGE
INDEX TO PLANS

DESIGN	BY Tariq Masroor	CHECKED Richard Porter	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF STRUCTURES STRUCTURE DESIGN 13	BRIDGE NO.	34-0004	SAN FRANCISCO - OAKLAND BAY BRIDGE INDEX TO PLANS	
DETAILS	BY Xijiang WU	CHECKED Richard Porter			POST MILE	7.85		
QUANTITIES	BY Richard Porter	CHECKED Tariq Masroor						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				CU 04 EA 043001	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES (PRELIMINARY STATE ONLY)	SHEET 3 OF 11

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NOTES

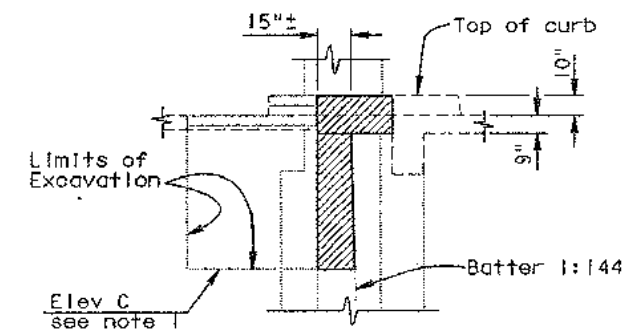
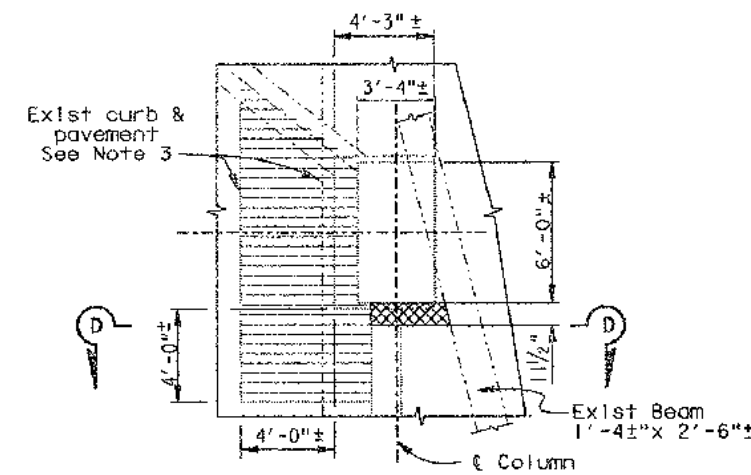
- For Elevations see applicable Bent sheets.
- See "Removal & Replacement Bents 48, 49 & 50" sheet.
- For curb, gutter, pavement and sidewalk removal, see "Road Plans".
- All existing elevations are from original as-built condition
- The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

LEGEND

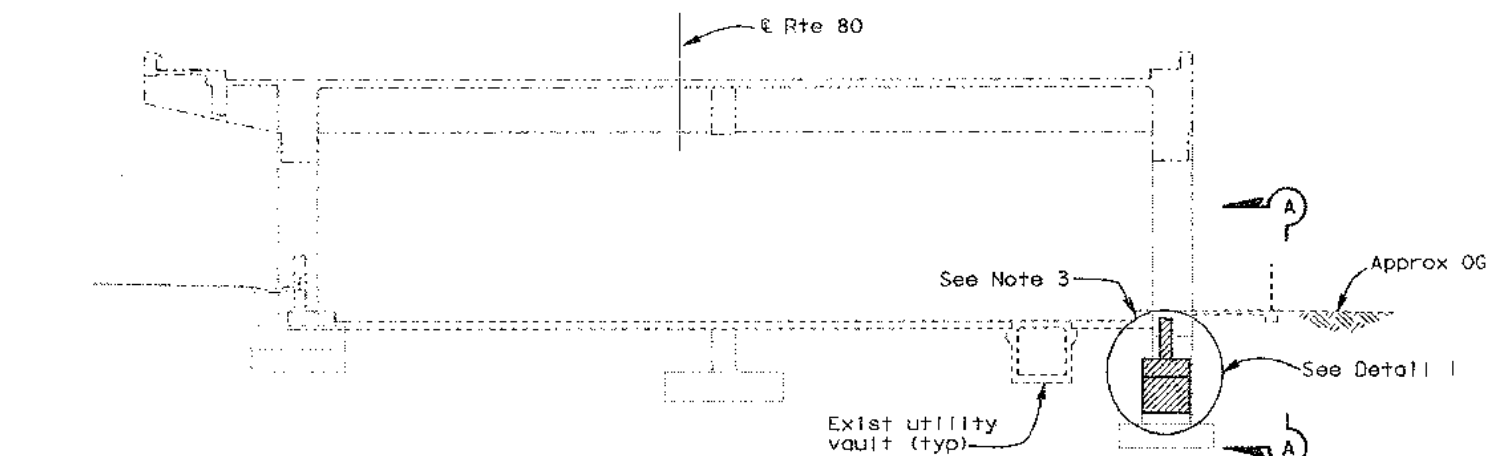
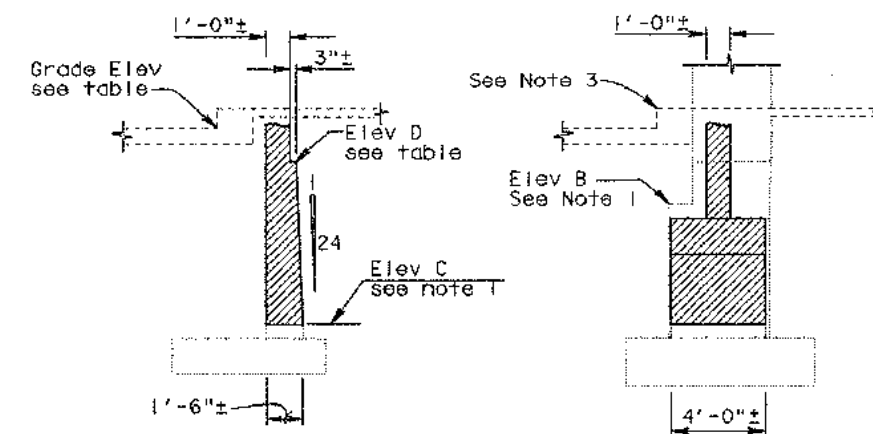
- Denotes existing structure
- Denotes existing roadway
- Denotes existing sub-structure
- Denotes concrete removal
- Denotes remove concrete and retain reinforcement
- Denotes limits of curb & pavement removal, see note 3

Bent No.	Elev D	Grade Elev*
46RT	169.5 ±	170.9 ±
47RT	170.0 ±	171.1 ±
48RT	170.5 ±	171.3 ±

* All Elevations in feet.

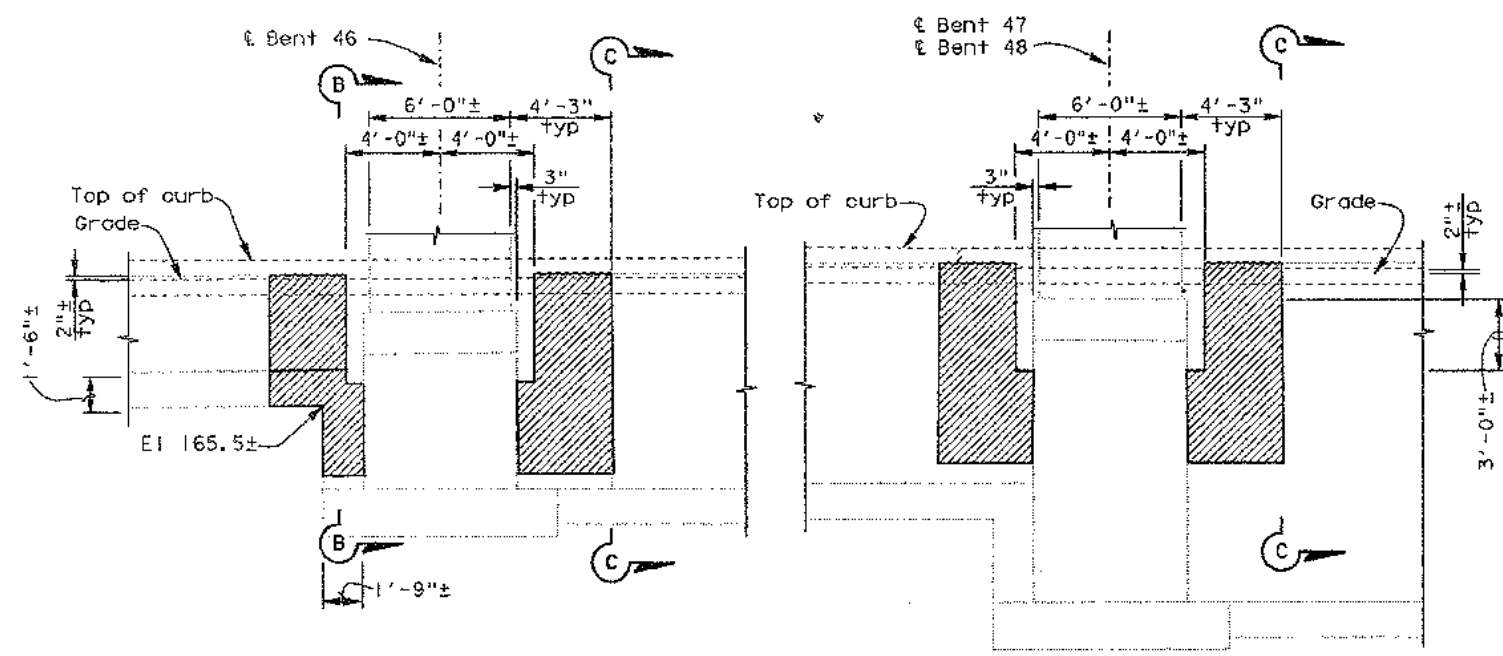


BENT 49 RT DETAILS



BENT 46 ELEVATION

Bent 47 similar
 Bent 48 similar (see note 2)



DETAIL 1 - SOUTH WALL

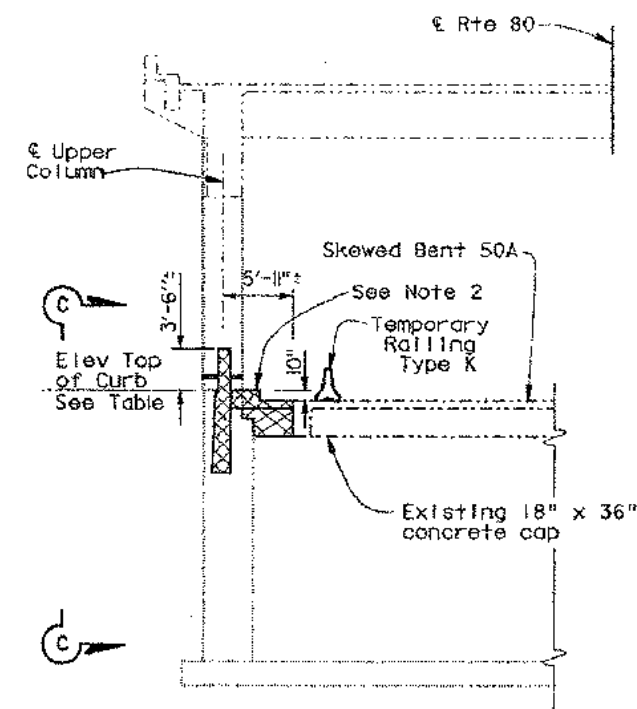
INTERIM SEISMIC RETROFIT PROJECT EAST BAY YERBA BUENA ISLAND VIADUCT

SAN FRANCISCO - OAKLAND BAY BRIDGE REMOVAL & REPLACEMENT BENTS 46RT-49RT

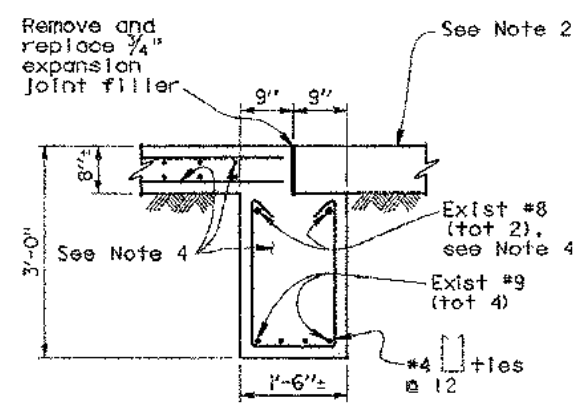
DESIGN	BY Tariq Masroor	CHECKED Richard Porter
DETAILS	BY Xiting Wu	CHECKED Richard Porter
QUANTITIES	BY Richard Porter	CHECKED Tariq Masroor

STATE OF CALIFORNIA	DIVISION OF STRUCTURES	BRIDGE NO. 34-0004
DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN 13	POST MILE 7.85

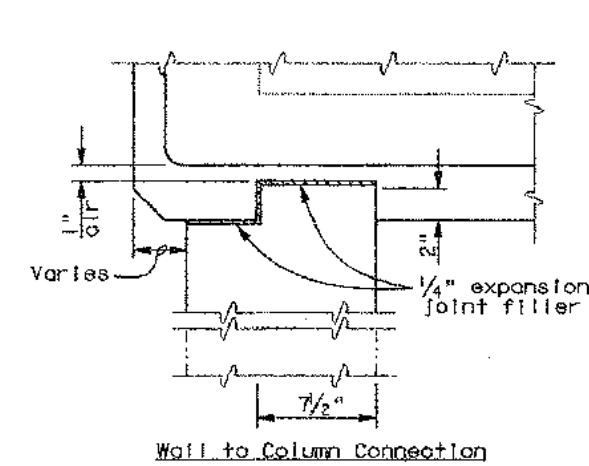
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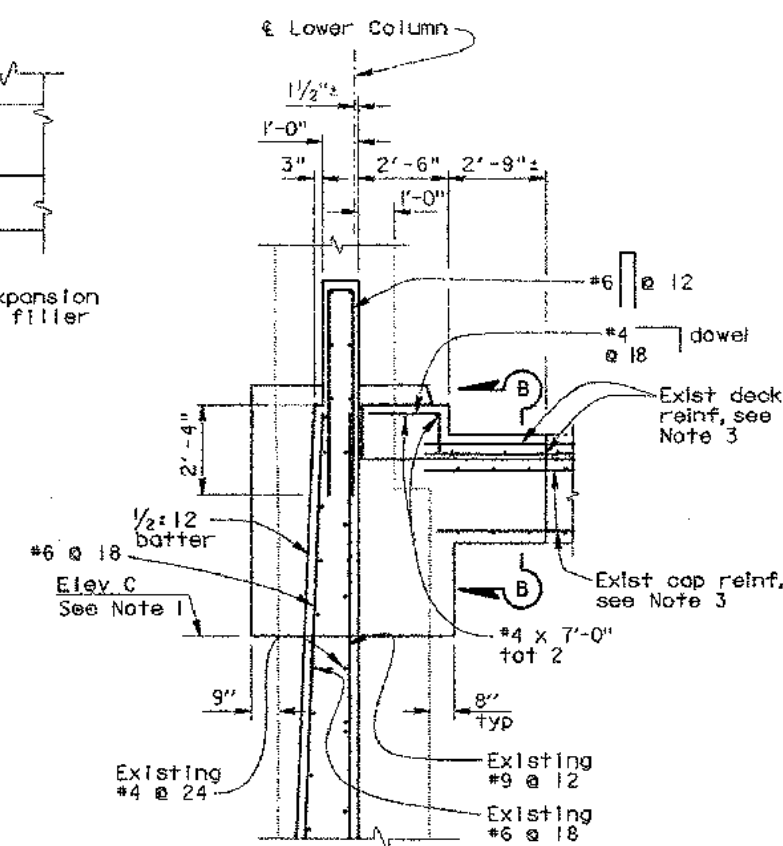
ELEVATION
 $\frac{1}{8}'' = 1'-0''$
 Bent 50 shown, Bents 48 & 49 similar.



SECTION B-B
 $\frac{3}{4}'' = 1'-0''$
 Bent 50 only



DETAIL B
 $2'' = 1'-0''$



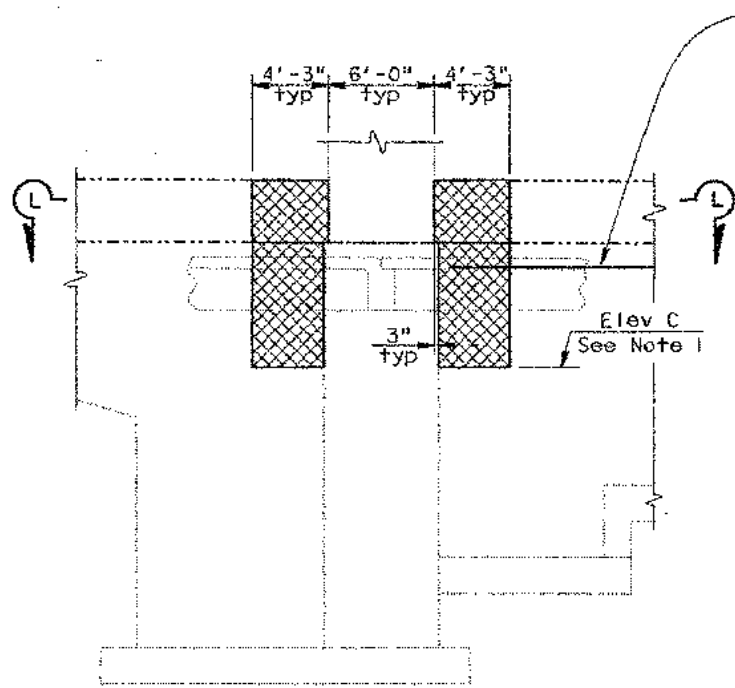
SECTION J-J
 $\frac{3}{8}'' = 1'-0''$

BENT	ELEV (TOP OF CURB) *
48LT	172.1
49LT	172.4
50LT	172.6

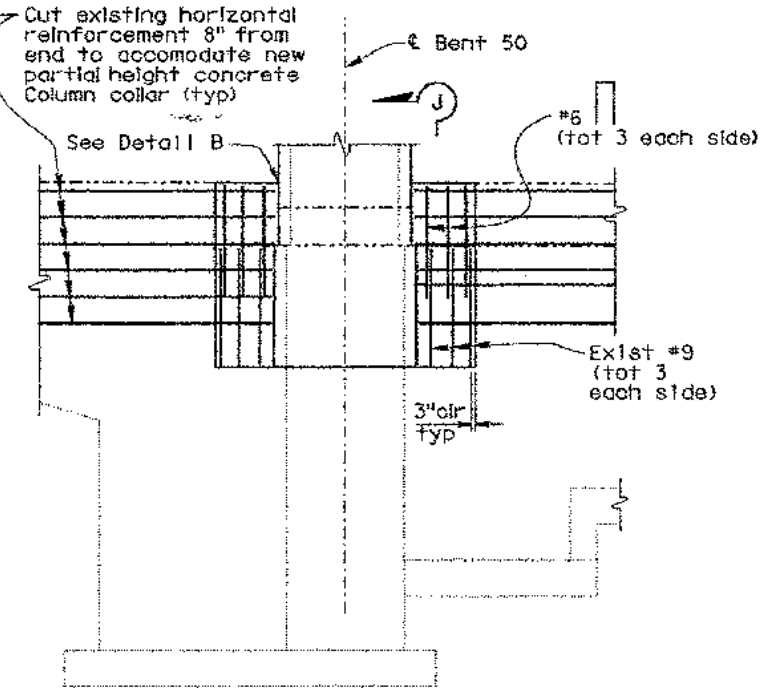
* All Elevations in feet.

- NOTES**
- For Elevations see applicable Bents 46, 47, 48 & 50 sheet.
 - For temporary railing Type K, curb and sidewalk removal, see "Road Plans".
 - Remove and replace concrete. Existing reinf to remain as shown.
 - For dimension not shown, see applicable Bent sheet.
 - All existing elevations are from original as-built condition.
 - The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

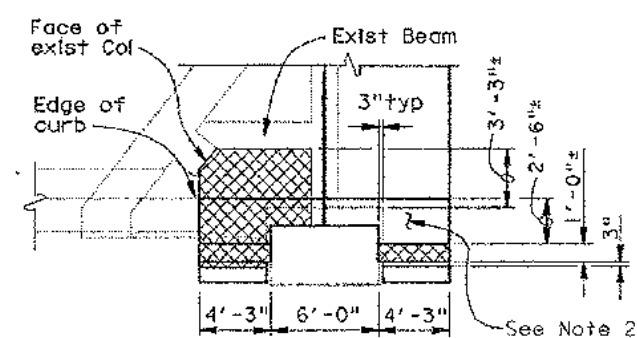
- LEGEND**
- Denotes existing structure
 - Denotes existing roadway
 - Denotes existing sub-structure
 - ▨ Denotes concrete removal
 - ▩ Denotes remove concrete and retain existing reinforcement



REMOVAL VIEW C-C
 $\frac{3}{16}'' = 1'-0''$



REPLACEMENT VIEW C-C
 $\frac{3}{16}'' = 1'-0''$



SECTION L-L
 $\frac{3}{16}'' = 1'-0''$
 Bent 50 only

NORTH WALL DETAIL

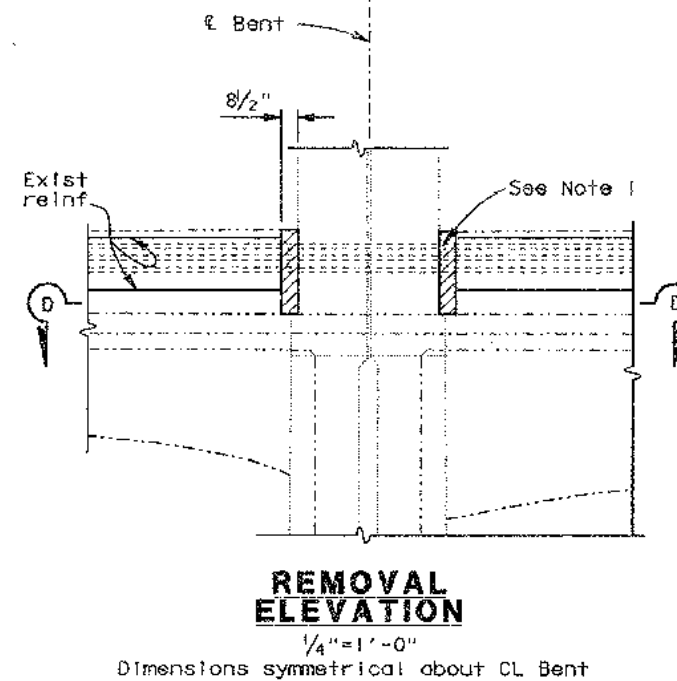
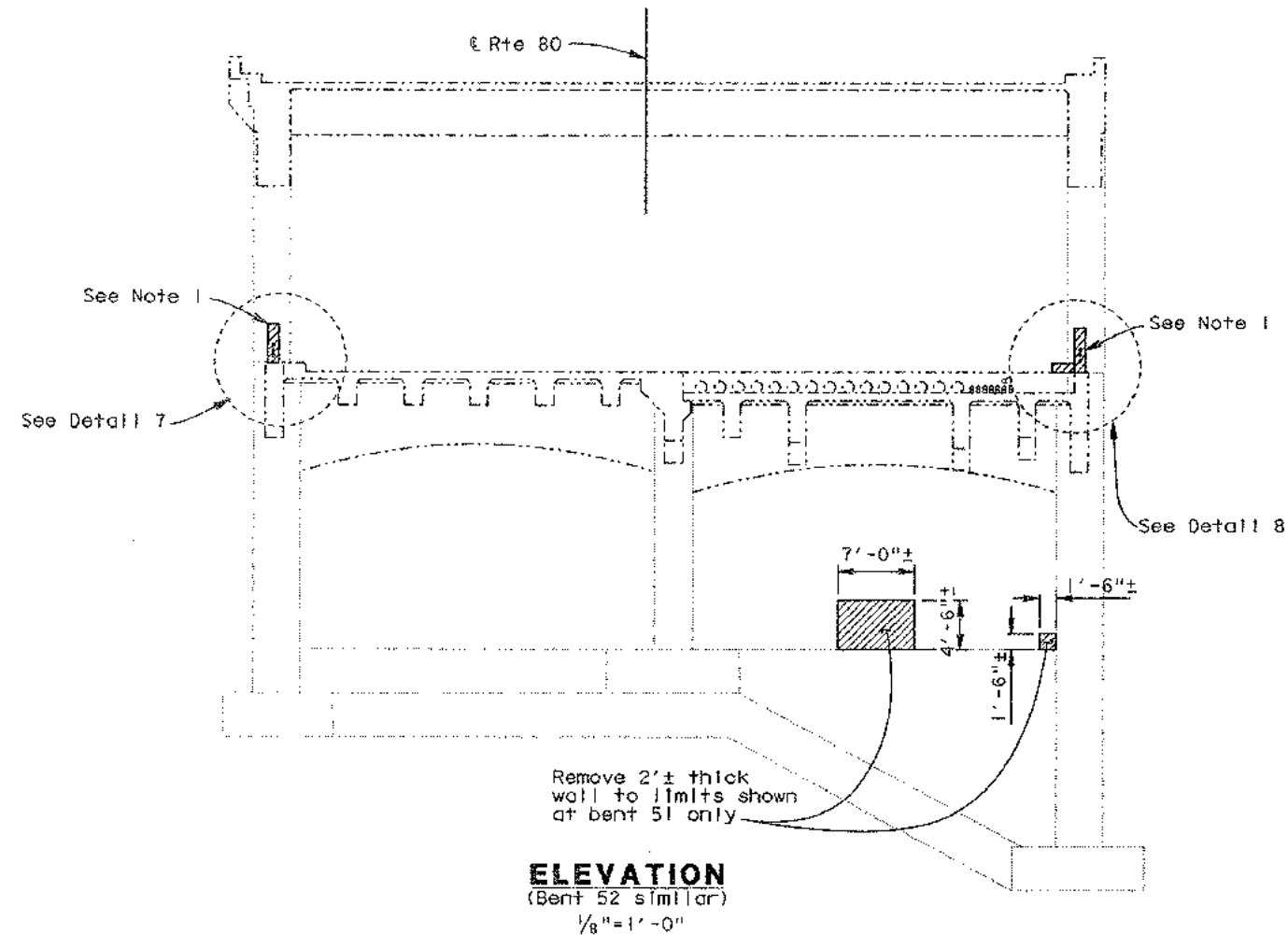
INTERIM SEISMIC RETROFIT PROJECT
EAST BAY YERBA BUENA ISLAND VIADUCT
SAN FRANCISCO - OAKLAND BAY BRIDGE
REMOVAL & REPLACEMENT BENTS 48LT-50LT

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Alameda	80	7.8/8.9, 0.0/1.1	63	205

Tariq Masroor
REGISTERED ENGINEER - CIVIL
10-30-97

12-8-97
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA
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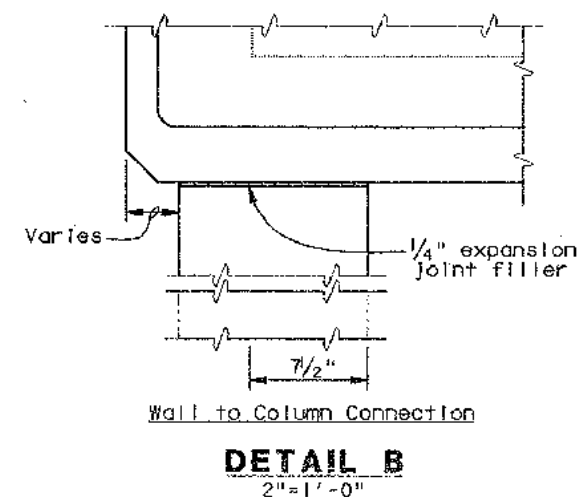
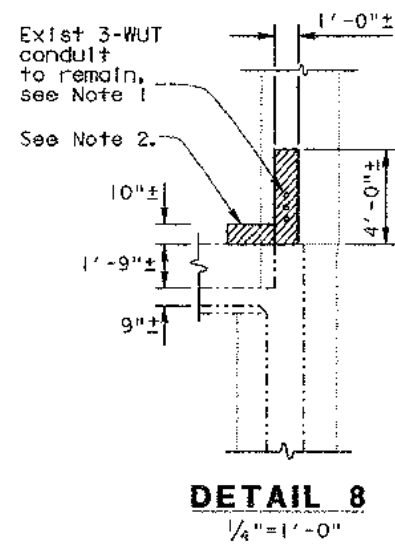
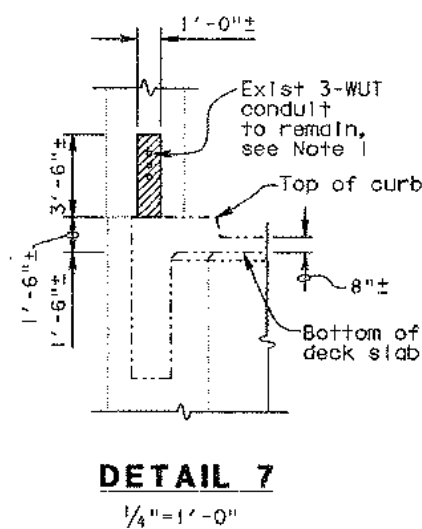


NOTES

1. The Contractor shall protect the existing conduits for Western Union Cable Line from damage during construction.
2. Curb removal and replacement at right column only.
3. All existing elevations are from original as-built condition.
4. The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

LEGEND

- Denotes existing structure
- Denotes existing roadway
- Denotes existing sub-structure
- Denotes concrete removal



INTERIM SEISMIC RETROFIT PROJECT
EAST BAY YERBA BUENA ISLAND VIADUCT
SAN FRANCISCO - OAKLAND BAY BRIDGE
REMOVAL BENT 51 & 52

DESIGN	BY Tariq Masroor	CHECKED Richard Porter
DETAILS	BY Xijiang WU	CHECKED Richard Porter
QUANTITIES	BY Richard Porter	CHECKED Tariq Masroor

STATE OF
CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN 13

BRIDGE NO.	34-0004
POST MILE	7.85

05 050 2139 (CADD 10/95)

ORIGINAL SCALE IN INCHES
FOR REDUCED PLANS

CU 04
EA 043001

DISREGARD PRINTS BEARING
EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)

3-2-91 5-9-91 5-22-91 5-22-91 5-22-91 5-22-91 5-22-91 5-22-91 5-22-91

SHEET 6 OF 11

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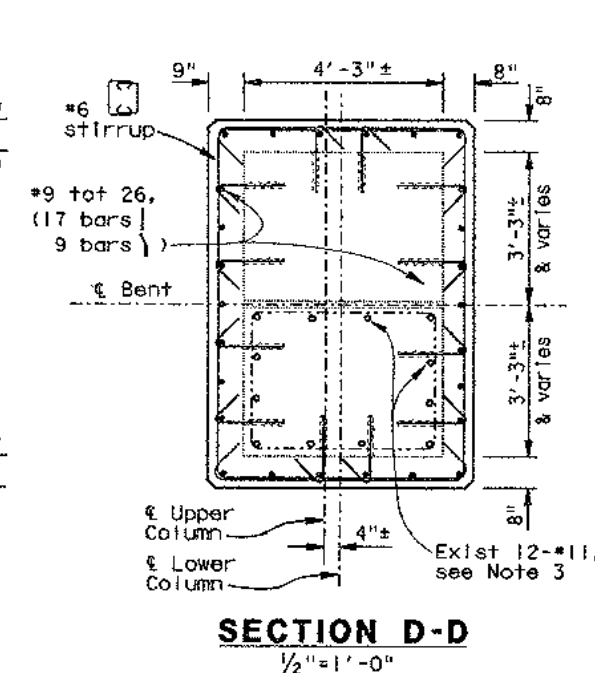
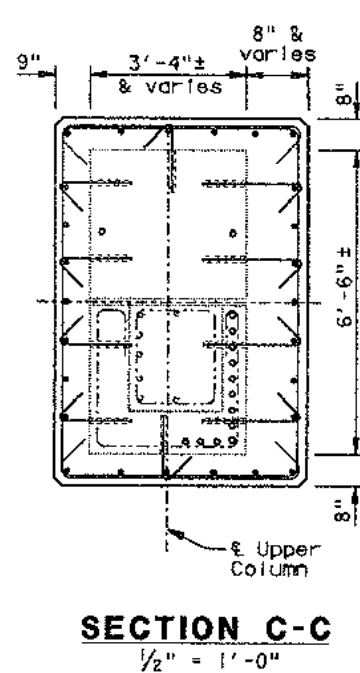
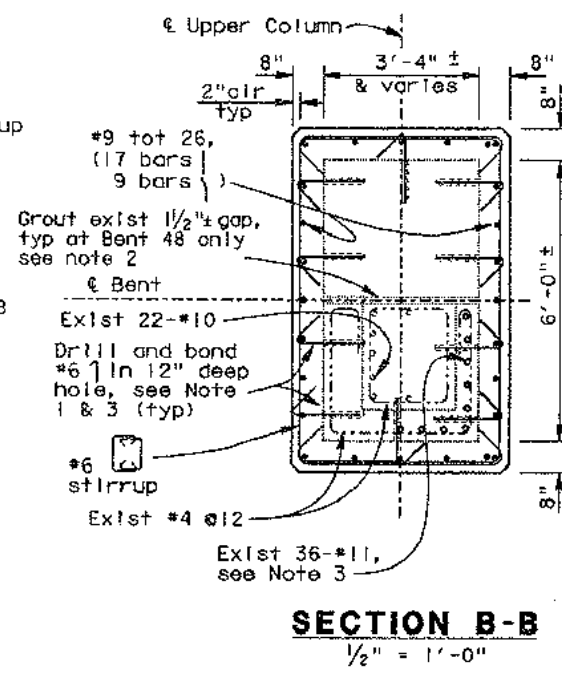
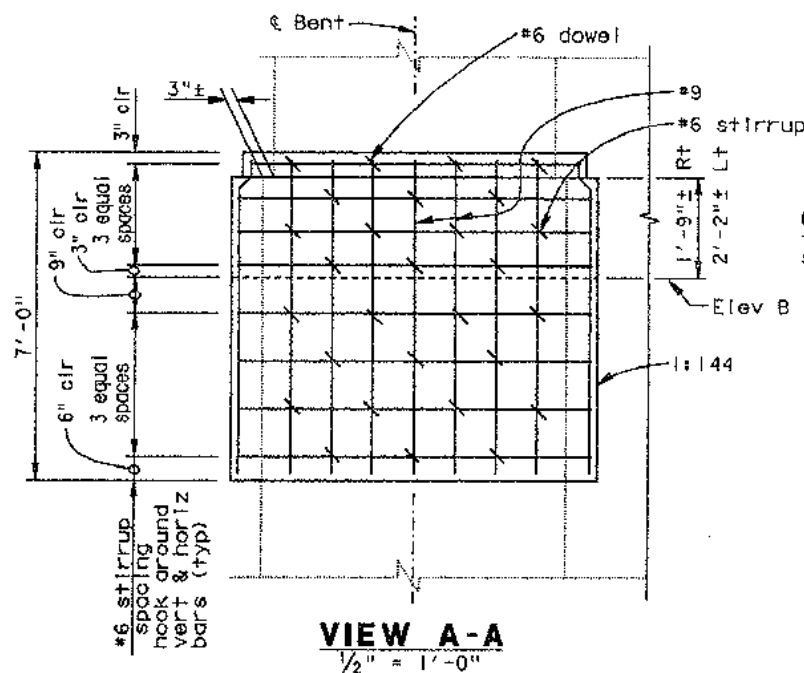
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DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Ala	80	7.8/8.9, 0.0/1.1	64	205

Tariq Masroor
REGISTERED ENGINEER - CIVIL
10-30-97
12-8-97
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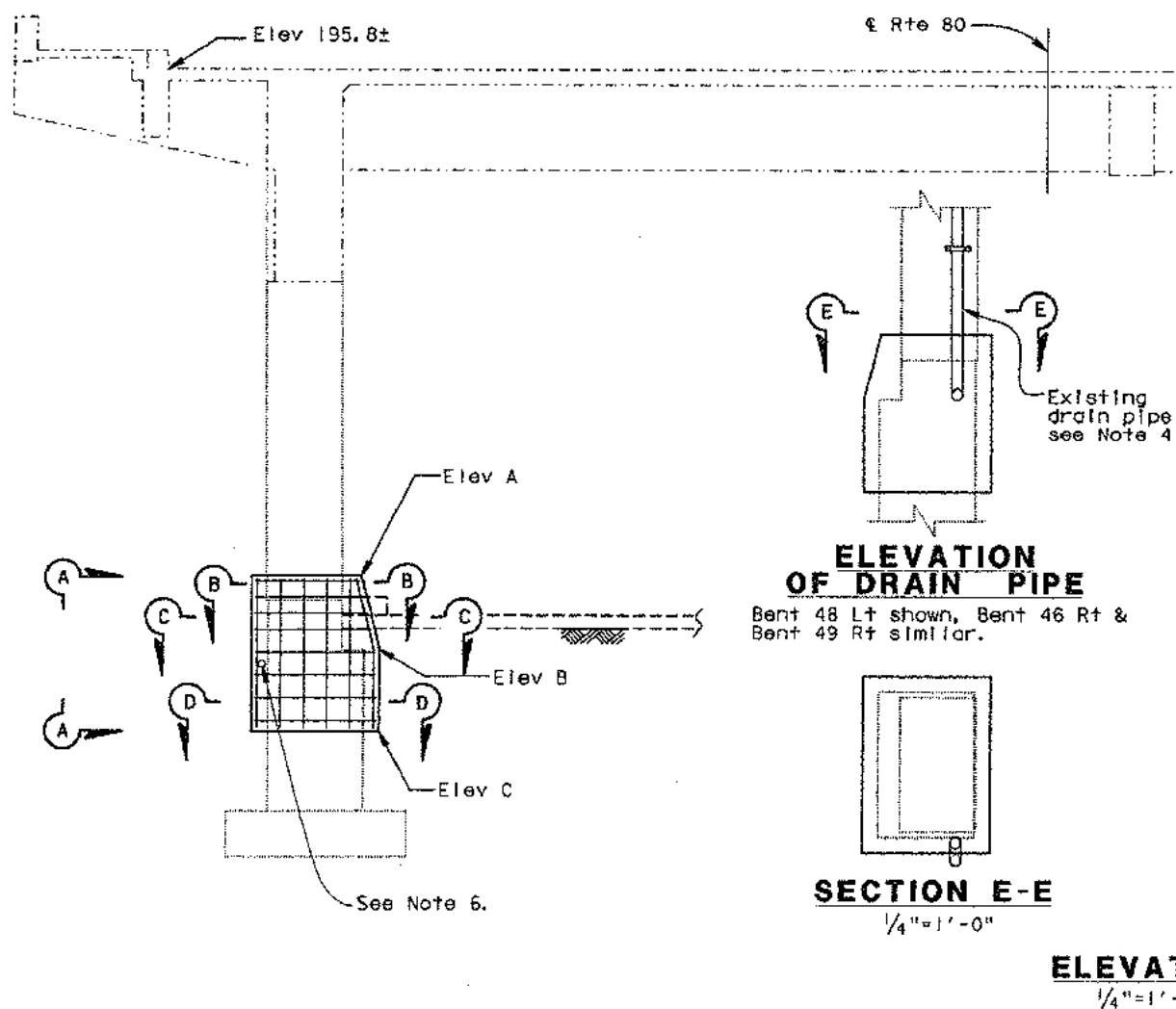
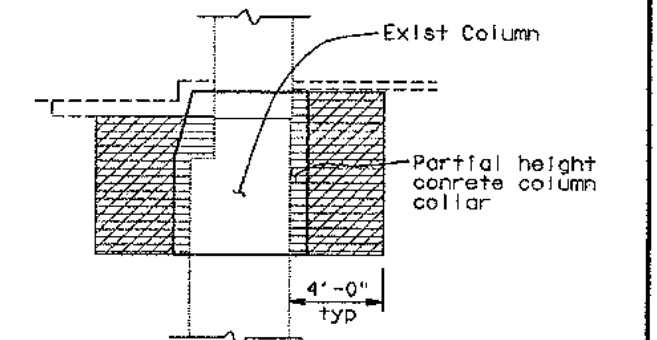
PROFESSIONAL ENGINEER
No. 51586
Exp. 6-30-98
CIVIL
STATE OF CALIFORNIA

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- NOTES**
- Adjust location of Drill and bond #6 dowel at 3:1 batter as required to clear existing column reinf.
 - Remove and clean any debris inside and fill void with grout at Bent 48 only.
 - Locate and determine spacing or pattern of existing column reinforcement prior to drilling. Method used shall not damage existing column concrete core.
 - Reconstruct existing drain pipe.
 - All existing elevations are from original as-built condition.
 - Existing 1 1/4" lighting conduit at Bent 50 to remain operational during construction. See applicable sheet for electrical work.
 - The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

- LEGEND**
- Denotes existing structure
 - Denotes existing sub-structure
 - Denotes existing roadway
 - Denotes new construction
 - Indicates structure excavation (Bridge)
 - Indicates structure backfill (Bridge)



BENT	ELEV A*	ELEV B*	ELEV C*
46 RT	170.63	167.75	163.63
47 RT	171.13	168.25	164.13
48 RT	171.63	168.75	164.63
48 LT	172.81	169.93	165.81
49 LT	172.98	170.1	165.98
49 RT	172.4	169.2	165.08
50 LT	173.08	170.2	166.08

* All Elevations in feet.

INTERIM SEISMIC RETROFIT PROJECT
EAST BAY YERBA BUENA ISLAND VIADUCT
SAN FRANCISCO - OAKLAND BAY BRIDGE
BENTS 46, 47, 48 & 50

DESIGN	BY Tariq Masroor	CHECKED Richard Porter
DETAILS	BY Xijiang WU	CHECKED Richard Porter
QUANTITIES	BY Richard Porter	CHECKED Tariq Masroor

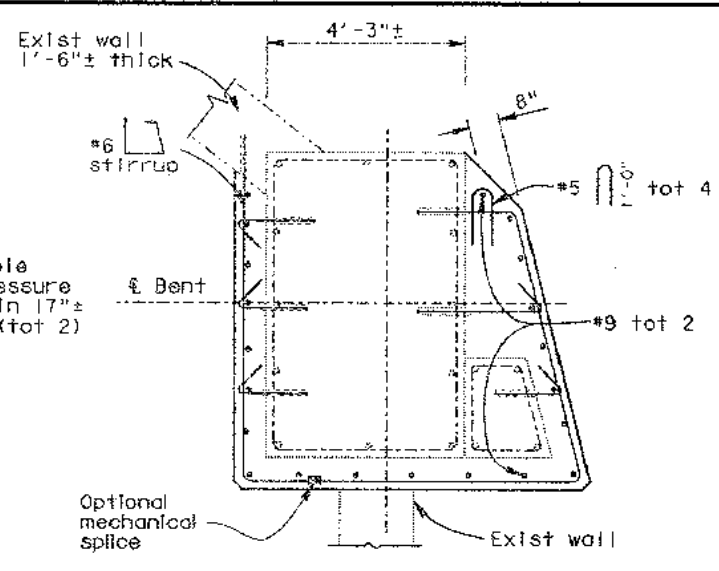
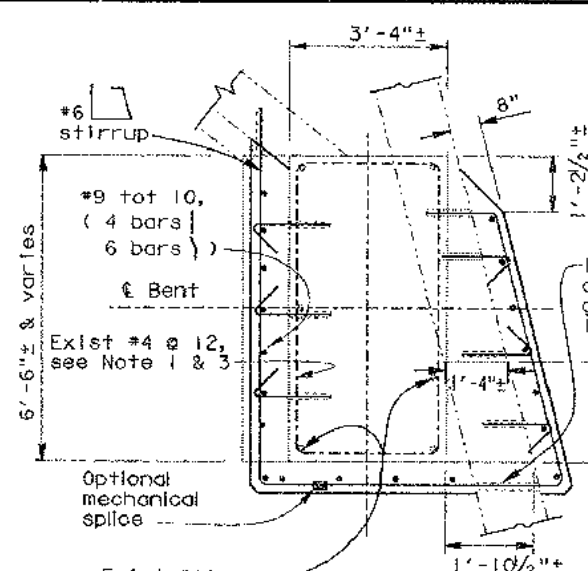
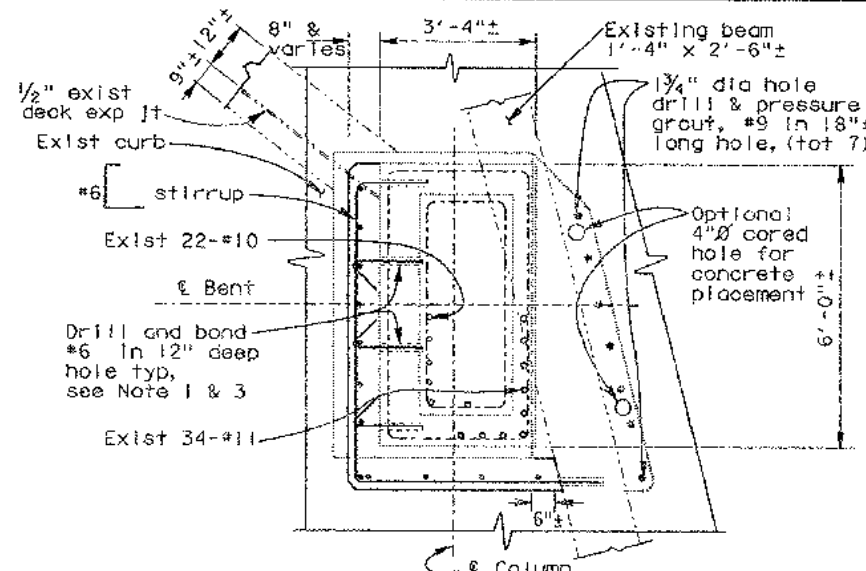
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF STRUCTURES
STRUCTURE DESIGN 13

BRIDGE NO.	34-0004
POST MILE	7.85

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Ala	80	7.8/8.9, 0.0/1.1	65	205

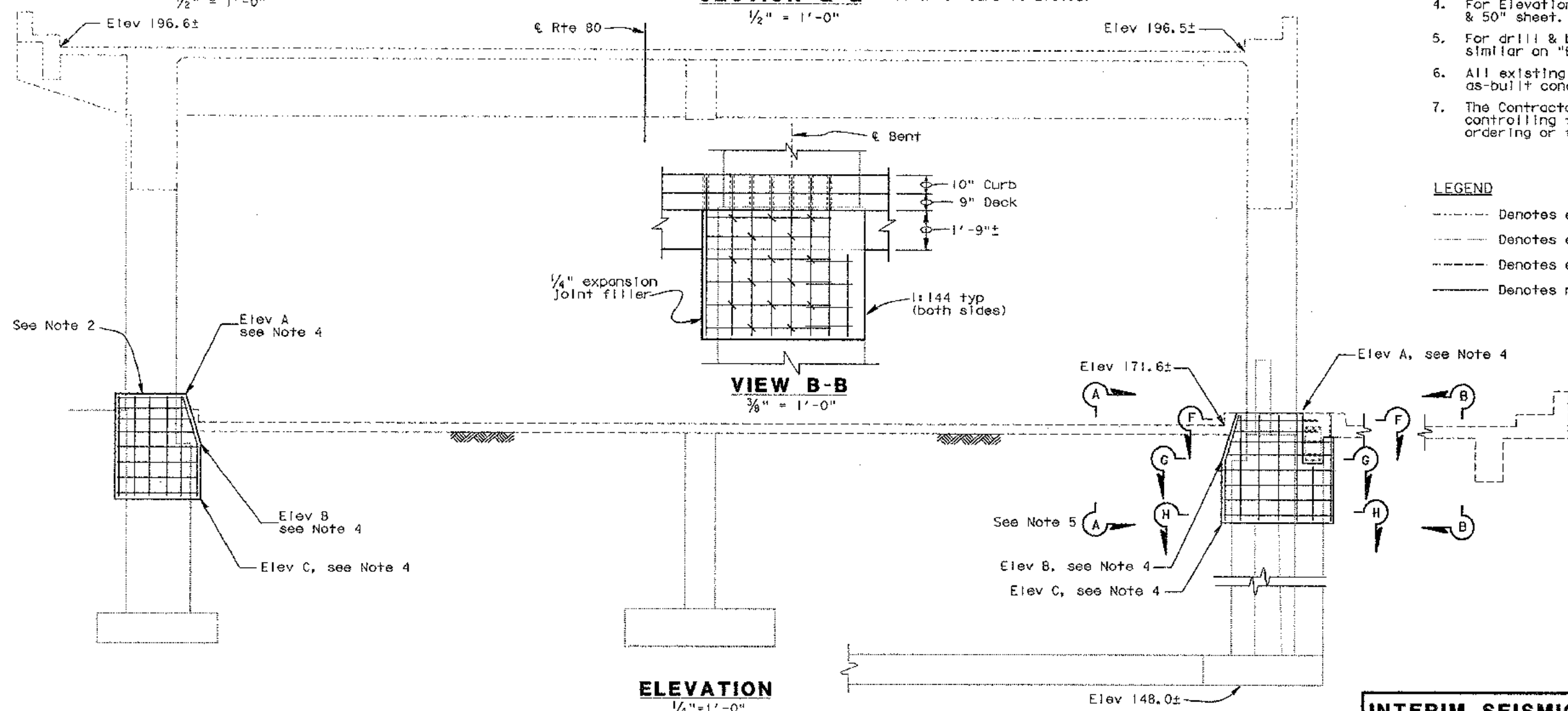
Tariq Masroor REGISTERED ENGINEER - CIVIL No. 51686 Exp. 6-30-98 CIVIL STATE OF CALIFORNIA	
12-8-97	
PLANS APPROVAL DATE	

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



- NOTES**
- Adjust location of Drill and bond #6 dowel at 3:1 batter as required to clear existing column reinf.
 - For left column details, see "Bent 46, 47, 48 & 50" sheet.
 - Locate and determine spacing or pattern of existing column reinforcement prior to drilling. Method used shall not damage existing column concrete core.
 - For Elevations, see "Bent 46, 47, 48 & 50" sheet.
 - For drill & bond dowel see View A-A similar on "Bent 46, 47, 48 & 50" sheet.
 - All existing elevations are from original as-built condition.
 - The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

- LEGEND**
- Denotes existing structure
 - Denotes existing sub-structure
 - Denotes existing roadway
 - Denotes new construction



DESIGN BY Tariq Masroor CHECKED Richard Porter			STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 34-0004 POST MILE 7.85		INTERIM SEISMIC RETROFIT PROJECT EAST BAY YERBA BUENA ISLAND VIADUCT SAN FRANCISCO - OAKLAND BAY BRIDGE BENT 49	
DETAILS BY Xijfing Wu CHECKED Richard Porter			DIVISION OF STRUCTURES STRUCTURE DESIGN 13		CU 04 EA 043001		DISCARD PRINTS BEARING EARLIER REVISION DATES REVISION DATES (PRELIMINARY STAGE ONLY) 3/14/97 3/27/97 4/29/97 5/2/97 5/29/97 6/29/97 7/29/97 8/29/97 9/29/97 10/29/97	
QUANTITIES BY Richard Porter CHECKED Tariq Masroor			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3		USERNAME: trlenard oebn1002_09075805		SHEET 8 OF 11	

05 050 239 (CADD 10/95)

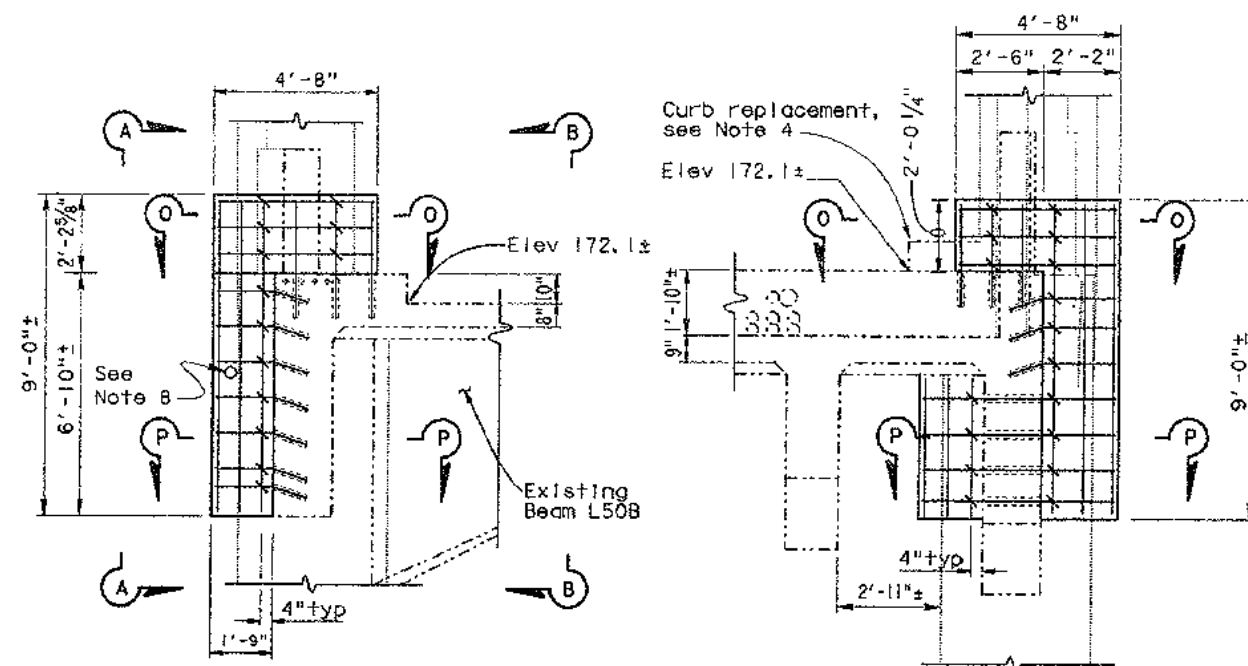
DATE PLOTTED: 3/29/97
TIME PLOTTED: 08:05

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SF, Alameda	80	7.8/8.9, 0.0/1.1	68	205

Tarja Masroor
REGISTERED ENGINEER - CIVIL
10-30-97

12-8-97
PLANS APPROVAL DATE

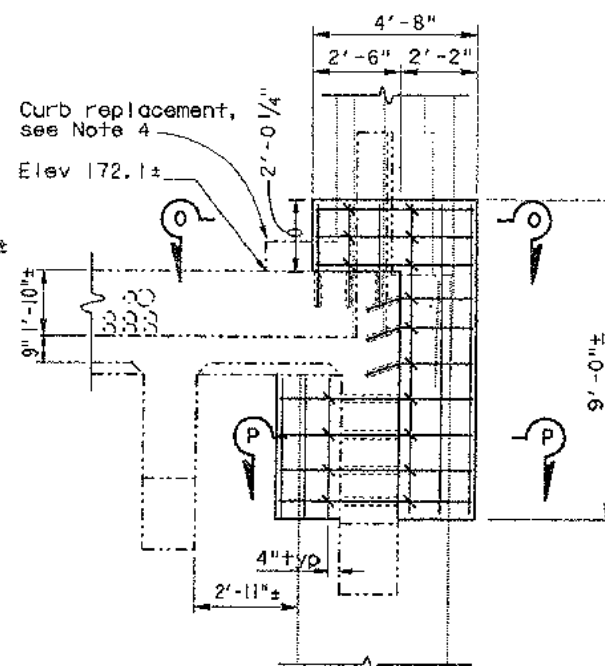
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



DETAIL A (LEFT COLUMN)

$\frac{3}{8}'' = 1'-0''$

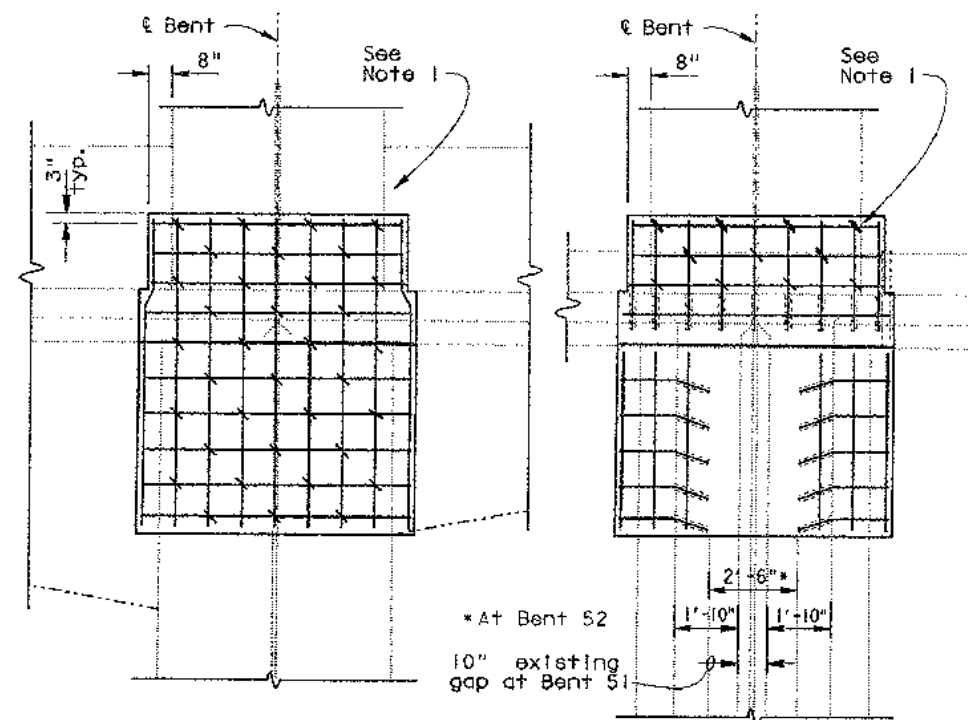
Bent 51 shown, Bent 52 similar.



DETAIL B (RIGHT COLUMN)

$\frac{3}{8}'' = 1'-0''$

Bent 51 shown, Bent 52 similar.



VIEW A-A

$\frac{3}{8}'' = 1'-0''$

Bent 51 shown, Bent 52 similar.

VIEW B-B

$\frac{3}{8}'' = 1'-0''$

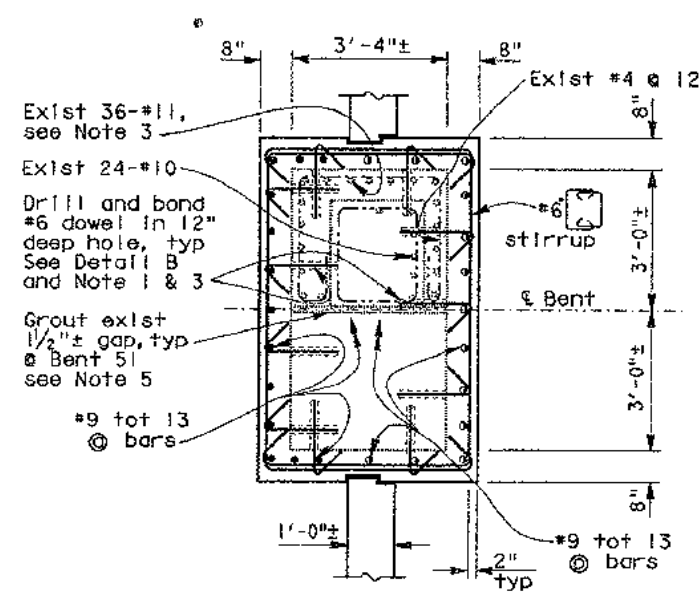
Bent 51 shown, Bent 52 similar.

NOTES

1. Adjust location of Drill and bond #6 dowel at 3:1 batter as required to clear existing column reinf.
2. See "Removal and Replacement Bent 51 & 52" sheet.
3. Locate and determine spacing of existing reinforcement prior to drilling holes. Method used shall not damage existing column concrete core.
4. For Detail A, Detail B and Sections 0-0 & P-P see "Bents 51 & 52 Details" sheet.
5. Remove and clean any debris inside and fill void with grout at Bent 51 only.
6. All existing elevations are from original as-built condition.
7. The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.
8. Existing $1\frac{1}{4}''$ lighting conduit at Bent 51 to remain operational during construction. See applicable sheet for electrical work.

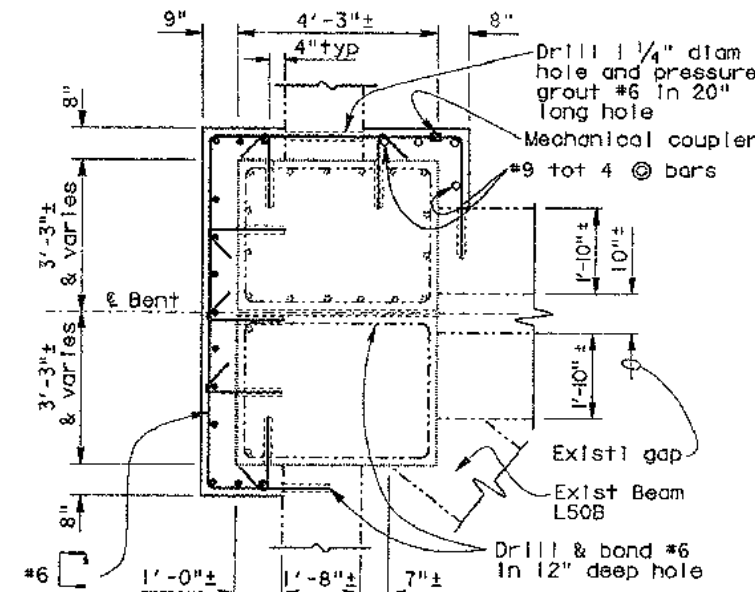
LEGEND

- Denotes @ Bar
- Denotes @ Bar
- Denotes @ Bar
- Denotes existing structure
- Denotes existing sub-structure
- Denotes new construction
- ▨ Denotes limits of shear wall in-fill



SECTION 0-0

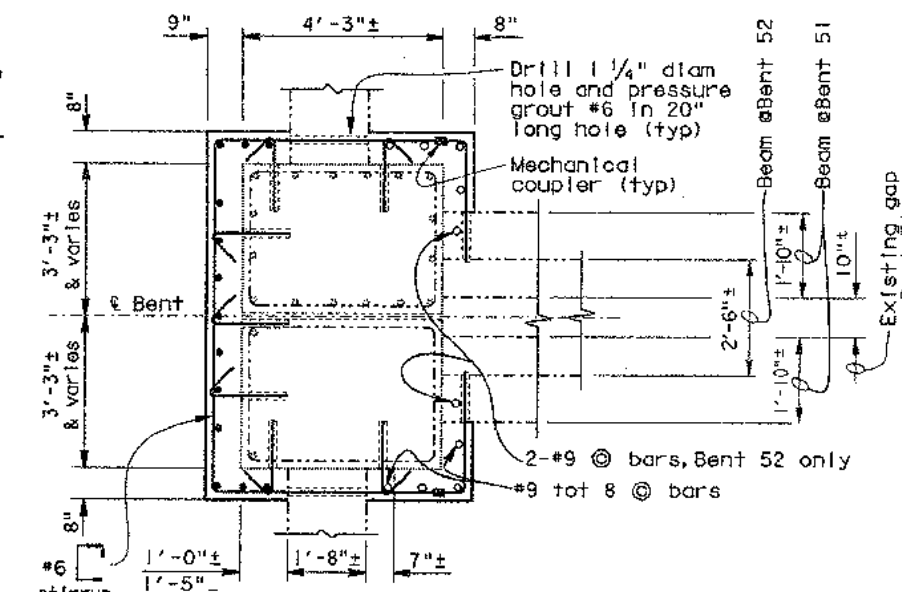
$\frac{1}{2}'' = 1'-0''$



SECTION P-P

$\frac{1}{2}'' = 1'-0''$

Bent 51 Left only



SECTION P-P

$\frac{1}{2}'' = 1'-0''$

INTERIM SEISMIC RETROFIT PROJECT

EAST BAY YERBA BUENA ISLAND VIADUCT

SAN FRANCISCO - OAKLAND BAY BRIDGE

BENT 51 - 52 DETAILS

DESIGN	BY Tarja Masroor	CHECKED Richard Porter
DETAILS	BY Xijiang WU	CHECKED Richard Porter
QUANTITIES	BY Richard Porter	CHECKED Tarja Masroor

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN 13

BRIDGE NO.	34-0004
POST MILE	7.85

CU 04
EA 043001

DISREGARD PRINTS BEARING
EARLIER REVISION DATES

REVISION DATE (PRELIMINARY STAGE ONLY)	12-8-97
SHEET	11
OF	11